

28 OCT 1959

Rpt. 13.

No. 12248

REPORT ON ELECTRICAL EQUIPMENT.

(OTHER THAN FOR THE PROPULSION OF THE VESSEL)

Received at London Office

Date of writing Report 27/10 1959. When handed in at Local Office 19 Port of Stockholm

No. in Survey held at Gävle Date, First Survey 17.3.59. Last Survey 21.9.1959. Reg. Book.

(No. of Visits 11)

40015 on the Twin Screw Motorship "AGATAN" Tons Gross 1500 Net -

Built at Gävle By whom built A/B Gävle Varv Yard No. 101 When built 1959

Owners U.S.S.R. Port belonging to Leningrad

Installation fitted by A/B Elektroarmatur, Gävle When fitted 1959

Is vessel equipped for carrying Petroleum in bulk No Is vessel equipped with D.F. Yes E.S.D. Yes Gy.C. Yes Sub.Sig. No Radar Yes

Plans, have they been submitted and approved Yes System of Distribution 3-phase Voltage of Lighting 220

Heating 220 Power 380 D.C. or A.C., Lighting A.C. Power A.C. If A.C. state frequency 50

Prime Movers, has the governing been found as per Rule when full load is thrown on and off Yes

Are the generators arranged to run in parallel Yes

Have machines 100 kw. and over been inspected by the Surveyors during manufacture and testing Yes Have certificates of test for machines

under 100 kw. been supplied and the results found as per Rule Yes Position of Generators Main engine room: One on port

and one on starboard side aft. Aux. engine room: Port, centre and starboard.

is the ventilation in way of generators satisfactory Yes are they clear of inflammable material and protected from mechanical injury and

damage from water, steam and oil Yes Switchboards, where are main switchboards placed Main engine room: On a

platform port side aft. Aux. engine room: On a platform at forward end.

are they in accessible positions, free from inflammable gases and acid fumes and protected from mechanical injury and damage from water,

steam and oil Yes, what insulation is used for the panels Dead front construction

Is the construction as per Rule, including locking of screws and nuts Yes Description of Main Switchgear

for each generator and arrangement of equaliser switches Triple pole linked circuit breaker with overcurrent release

(in 2 phases), Reverse power release (in one phase) and No Volt release (between 2 phases).

and the switch and fuse gear (or circuit breakers) for each outgoing circuit Triple pole linked circuit breaker with overcurrent

trip in each phase.

Are compartments containing switchboards composed of fire-resisting material or lined as per Rule Yes Instruments on main switchboard Aux. E.R.13

ammeters A.E.R.9 voltmeters A.E.R.2 synchronising devices. / Earth Testing, state means provided Earth

indicating lamps. Preference Tripping, state if provided None fitted

Switches, Circuit Breakers and Fuses, are they as per Rule Yes are the fuses an Approved Type Yes

make of fuses ASEA are all fuses labelled Yes If circuit breakers are provided for the generators, at what

overload do they operate 110 % of the amperage and 10 seconds, and at what do the reverse protective-

devices operate 15 % Cables, are they insulated and protected as per Rule Yes

under maximum load less than 6 % Are all paper insulated and varnished cambric insulated cables sealed at the ends None fitted

Are all the cable runs in accessible positions not exposed to drip or accumulation of water or oil, high temperatures or risk of mechanical

damage Yes, are any cables laid under machines or floorplates Yes, if so, are they adequately protected Yes State

type of cables (if in conduit this should also be stated) in machinery spaces VIRLC + A, galleys VIRLC + A

and laundries VIRLC + A State how the cables are supported or protected

Machinery spaces: VIRLCA clipped to structure or cable trays.

Accommodations: VIRLC clipped to structure or run in conduit.

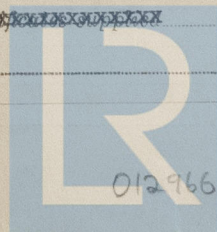
Are all lead sheaths, armouring and conduits effectually bonded and earthed Yes Are all cables passing through decks and watertight

bulkheads provided with deck tubes or watertight glands Yes, where unarmoured cables pass through beams, etc., are the holes

effectively bushed Yes Refrigerated chambers, are the cables and fittings as per Rule Yes - domestic only.

Have the cables been inspected by the Surveyors during manufacture and testing Yes

Are the cables accessible for maintenance at all times



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Alternative Lighting, are the groups of lights in the engine and boiler rooms arranged as per Rule. Yes Emergency Supply, state position
Main eng. room: 2 lamps (1 group) connected before circuit breakers and 4 lamps (1 group) from battery.
Aux. eng. room: 3 lamps (1 group) connected before circuit breakers and 2 lamps (1 group) from battery.

Navigation Lamps, are they separately wired Yes controlled by separate double pole switches and fuses Yes. Are the switches and fuses in a position accessible only to the officers on watch Yes, is an automatic indicator fitted Yes. Is an alternative supply provided Yes.

Secondary Batteries, are they constructed, fitted and adequately ventilated as per Rule..... Yes....., state battery capacity in
One 160 Ah for wireless
One 160 Ah for emergency light ~~None required as per basic compliance with 1975 International Convention~~

Lighting, is fluorescent lighting fitted.....No.....~~has state owned lamp voltage~~.....~~and components where lamps are fitted~~.....

Fittings, are all fittings on weather decks, in stokeholds and engine rooms and wherever exposed to drip or condensed moisture, weatherproof.....Yes.....

Searchlights, No. of 3, whether fixed or portable Fixed, are they of the carbon arc or of the filament type Filament

Heating and Cooking, is the general construction as per Rule.....Yes....., are the frames effectually earthed.....Yes....., are heaters in the accommodation of the convection type.....Yes..... Motors, are all motors constructed and installed as per Rule and placed in well-ventilated

Are motors coupled to oil fuel transfer and pressure pumps capable of being stopped from a position accessible in the event of fire in the pump compartment. Yes Have motors of 100 BHP and over been inspected by the Surveyors during manufacture and testing. None fitted

Have certificates of test for motors under 100 BHP intended for essential sea services been supplied and the results found as per Rule..... Yes

Lightning Conductors, where required are they fitted as per Rule..... None fitted

~~Ships carrying Oil having a Bulk Point of less than 1000 ft.~~ ~~x x x x o u t s i d e o f p o r t o f c o n v e y o r t h e R a l e s p e r s o n s h i p s b e e n c o m p l e t~~

~~xxxx~~, ~~overall case record number of body of type~~, ~~xxxxxx~~ are the fittings for pump

[illegible]

E.S.D. if fitted state maker..... ATLAS location of transmitter and receiver In No. 2 deep tank

Spare Gear, if the vessel is for open sea service have spares been provided as per Rule and suitably stored in dry situations..... Yes

Insulation Tests, has the insulation resistance of all circuits and apparatus been tested and found satisfactory..... Yes

PARTICULARS OF GENERATING PLANT.

| DESCRIPTION OF GENERATOR. | No. of | MAKER. | RATED AT | | | | PRIME MOVER. | |
|---------------------------------------|--------|----------------------|-----------------------|--------|----------|-------------------|--------------|------------------|
| | | | KW# per Generator. | Volts. | Ampères. | Revs. per Min. | TYPE. | MAKER. |
| MAIN | 2 | Hans Still AG (Ham). | 100 | 400 | 144 | 1000 | Diesel | M.A.N. AG (Aug.) |
| | 3 | " " " " | 200 | 400 | 289 | 600 | " | " " " " |
| EMERGENCY .. ROTARY TRANSFORMER | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

GENERATOR CABLES.

[illegible]

MAIN DISTRIBUTION CABLES (to Auxiliary Switchboards, etc.).

[illegible]

DISTRIBUTION CABLES (to Section-Boards and Distribution-Fuse-Boards, etc.).

[illegible]

MOTOR CABLES.

| ALL IMPORTANT MOTORS TO BE ENUMERATED. | No. | B.H.P. | | | | | | | |
|---|-----|--------|---|-----|------|----|----------------|-----|--------|
| Starting air compressors | 2 | 19 | 1 | 16 | 27.4 | 33 | 12&28 | VIR | IC & A |
| Stand by lub. oil pumps | 2 | 10.5 | 1 | 6 | 15.2 | 21 | 26&24 | " | "- |
| Main cooling water pumps | 3 | 36 | 1 | 50 | 50.5 | 69 | 40,44&40 | " | "- |
| Aux. cooling water pumps | 1 | 14 | 1 | 10 | 22 | 27 | 24 | " | "- |
| Ballast pump | 1 | 15 | 1 | 16 | 22 | 33 | 12 | " | "- |
| Bilge pump | 1 | 9.5 | 1 | 6 | 13.8 | 21 | 16 | " | "- |
| Fire pump | 1 | 15 | 1 | 16 | 22 | 33 | 20 | " | "- |
| O.F. transfer pump | 1 | 16 | 1 | 16 | 23 | 35 | 26 | " | "- |
| O.F. transfer pump | 1 | 4 | 1 | 4 | 5.8 | 16 | 16 | " | "- |
| Stand by pumps for KANEWA | 2 | 4.5 | 1 | 4 | 6.5 | 16 | 34&40 34&28 | " | "- |
| Oil purifiers | 3 | 3.5 | 1 | 2.5 | 5.1 | 13 | 12,16&20 | " | "- |
| DB feed water pump | 1 | 3.2 | 1 | 2.5 | 5.3 | 13 | 70 | " | "- |
| Turning gears | 2 | 4.5 | 1 | 4 | 6.5 | 16 | 10&16 | " | "- |
| Eng. room fans | 2 | 8.5 | 1 | 6 | 12.5 | 21 | 10&14 | " | "- |
| Steering gear | 1 | 15 | 1 | 10 | 22 | 27 | 54&100 | " | "- |
| Windlass forward | 1 | 26 | 1 | 35 | 37.5 | 55 | 60 | " | "- |
| Windlass aft | 1 | 16 | 1 | 16 | 23 | 33 | 100 | " | "- |
| Towing winch | 1 | 45 | 1 | 35 | 60 | 55 | 70 | " | "- |
| Aux. cool. water pump | 1 | 5.5 | 1 | 4 | 7.3 | 16 | 12 | " | "- |

The Electrical Equipment is installed in accordance with the approved plans and the requirements of the Rules.

All Insulated Conductors are guaranteed to have been tested at the maker's works as specified in the Rules.

The foregoing is a correct description.

A.-B. ELEKTRO-ARMATUR

H. S. Munch

Electrical Contractors.

Date 21-10-1959

COMPASSES.

Have the compasses been adjusted under working conditions. Yes

Aktiebolaget Gävle Varv

Sigurd Engström

Builder's Signature.

Date 22.10.59

Have the foregoing descriptions and schedules been verified and found correct. Yes

Is this installation a duplicate of a previous case. Yes If so, state name of vessel "PAMIR" & "ALDAN"

Plans. Are approved plans forwarded herewith. No If not, state date of approval 2.5.58.

Certificates. Are certificates of test for motors engaged on essential sea services and generators forwarded herewith. Yes

General Remarks. (State quality of workmanship and materials, opinions as to class, etc.)

The electrical installation of this vessel has been installed in accordance with the Rules and approved plans, and tested under working condition to my satisfaction.

The workmanship and materials used are good.

Total Capacity of Generators 800 KVA ~~xxxxxx~~ (P.F.=0.8).

The amount of Fes ... kr. 2.130:--

When applied for,
23/10 19 59.

Travelling Expenses (if any) ~~xxxxxx~~

When received,
19.

J. Eriksson
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRIDAY 11 DEC 1959

Assigned

See Apr. 1